

Appln. No.: 10/804,431  
Amendment Dated 6/22/2006  
Reply to Office Action of March 22, 2006

MATB-404US

**Remarks/Arguments:****Response to Restriction Requirement**

Applicants affirm the election, without traverse, of the invention of Group 1, claims 1-11.

**Pending Claims**

Claims 1-11 are pending. Claims 12-37 have been canceled. New claim 38 has been added.

Claims 1-11 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Cote (US 4,869,778) in view of Srinivasarao et al., (Three-Dimensionally Ordered Array of Air Bubbles in a Polymer Film) and Maleyre (US 2,530,436). Applicants respectfully submit that claims 1-11, as amended, are not subject to this rejection for the reason set forth below.

Claim 1 of the present application, as amended, explicitly recites a, "microcavity-forming system for making microcavities in a wire..." (Emphasis added.) As the Examiner states, in paragraph 12 of the Office Action, the combination of Cote and Srinivasarao et al. does not teach a system that is capable of processing wire substrates. Both Cote and Srinivasarao et al. only teach processing of flat substrates.

To overcome this deficiency, the Examiner cites Maleyre as disclosing the use of grooved wheels to guide a wire through a system for processing the surface of the wire. The Examiner then states that the combination of Maleyre with Cote and Srinivasarao et al. would render the system for forming microcavities in wires as recited in claim 1 obvious.

Although Maleyre does disclose the use of grooved wheels to guide a wire through a surface processing system, the combination of Maleyre with Cote and Srinivasarao et al. does not disclose or suggest,

...a mask-forming station... ..blowing moist air over the polymer-coated wire to form air bubbles which result in holes substantially evenly distributed over the outer surface of the polymer coating, thereby creating a mask;...

as set forth in claim 1, as amended.

Even assuming that the combination of Cote and Srinivasarao et al. discloses a mask-forming station that could be used to form air bubbles in a flat polymer coating formed on a flat substrate by blowing moist air over the coating, it would not be obvious to use the resulting

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mask-forming station to form air bubbles that result in holes substantially evenly distributed over the outer surface of a cylindrical polymer coating formed on a wire substrate.

Cote does not teach a means of forming air bubbles in a polymer coating formed on a substrate by blowing moist air over the coating.

Srinivasarao et al. do disclose a method for forming an array of air bubbles in a polymer coating. This method disclosed in Srinivasarao et al., however, involves blowing moist air over the surface to form water droplets that then sink into the coating due to the higher density of the water droplets, as shown in Figure 4 and described in column 1 of page 82. Thus, the method disclosed in Srinivasarao et al. requires that the water droplets sink vertically into the coating under the force of gravity. The method as taught by Srinivasarao et al. would not work to form air bubbles that result in holes substantially evenly distributed over the outer surface of a cylindrical polymer coating formed on a wire substrate and, therefore, one skilled in the art would not understand Srinivasarao et al. to disclose or suggest a mask-forming station that forms air bubbles which result in holes substantially evenly distributed over the outer surface of a cylindrical polymer coating formed on a wire substrate, as recited in claim 1, as amended.

Maleyre does disclose a system for processing the surface of the wire; however, Maleyre merely provides grooved wheels to guide a wire through that system and does not suggest or teach a means by which the method disclosed in Srinivasarao et al. for forming an array of air bubbles in a planar horizontal polymer coating could be applied to a polymer coating formed on a non-planar surface, such as a wire.

Because the combination of Cote, Srinivasarao et al., and Maleyre does not disclose or suggest these features of claim 1, as amended, claim 1 can not be subject to rejection under 35 U.S.C. § 103(a) as unpatentable over Cote in view of Srinivasarao et al. and Maleyre. As claims 2-11 depend from claim 1, these claims are not subject to this rejection as well.

#### Newly Added Claim

Newly added dependent claim 38 includes specific features of the mask-forming station recited in claim 1, as amended. Support for this claim may be found in paragraph [0045] of the specification. As described in the specification in paragraph [0045] and illustrated in Figure 3 of the present application, the mask forming station recited in claim 38 not only blows air over the wire while it is drawn through the chamber, but it also rotates the wire about its longitudinal axis, as illustrated by arrow C.

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Cote, Srinivasarao et al., and Maleyre, either singly or in combination, do not disclose or suggest a means for rotating the substrate during mask formation.

Conclusion

In view of the foregoing amendments and remarks, Applicants request that the Examiner reconsider and withdraw the rejection of claims 1-11. Applicants also request consideration and allowance of newly added claim 38.

Respectfully submitted,



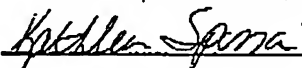
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